

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 3, 2018/2019

**BFN3084 – INTERNATIONAL FINANCE**

(All sections / Groups)

28 May 2019

9:00 a.m. – 11:00 a.m.

(2 Hours)

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### INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 3 pages with 4 Questions only.
2. Attempt ALL questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please print all your answers in the Answer Booklet provided.

**QUESTION 1 (25 MARKS)**

Netspace and Netplay can borrow for a ten-year term at the following rates:

	Netspace	Netplay
Moody's credit rating	AAA	BBB
Fixed-rate borrowing cost	9%	12%
Floating-rate borrowing cost	LIBOR	LIBOR+2.5%

- Calculate the quality spread differential (QSD).  
(5 marks)
- Develop an interest rate swap in which both Netspace and Netplay have an equal cost savings in their borrowing costs. Assume Netspace desires floating-rate debt and Netplay desires fixed-rate debt. No swap bank is involved in this transaction.  
(9 marks)
- Do problem (b) over again, this time assuming more realistically that a swap bank is involved as an intermediary. The swap bank wants to earn 0.1% from the total cost saving and Netspace and Netplay will share the balance of cost saving equally. You are required to act as a swap bank to construct swap transactions for Netspace and Netplay. Please provide detailed transactions for each of the three counter parties with an illustration chart.  
(11 marks)

**QUESTION 2 (25 MARKS)**

Currently, the spot exchange rate is \$1.60/€ and the three-month forward exchange rate is \$1.65/€. The three-month interest rate is 6.0% per annum in the U.S. and 4% per annum in Italy. Assume that you can borrow as much as \$1,600,000 or €1,000,000.

- Determine whether the interest rate parity is currently holding.

(6 marks)

Continued...

- a. If the IRP is not holding, how would you carry out covered interest arbitrage? Show all the steps and determine the arbitrage profit.

(15 marks)

- b. Explain how the IRP will be restored as a result of covered arbitrage activities.

(4 marks)

### **QUESTION 3 (25 MARKS)**

You plan to visit one of your friends living in Colorado, America in three months. You expect to incur the total cost of US\$20,000 for lodging, meals and transportation during your stay. As of today, the spot exchange rate is RM4.01/ US\$ and the three-month forward rate is RM4.05/ US\$. You can buy the three-month call option on US\$ with the exercise rate of RM4.10/ US\$ for the premium of RM1 per US\$. Assume that your expected future spot exchange rate is the same as the forward rate. The three-month interest rate is 4 percent per annum in Malaysia and 3 percent per annum in the United States.

- a. Calculate your expected Ringgit cost of buying US\$20,000 if you choose to hedge via call option on US\$.

(7 marks)

- b. Calculate the future Ringgit cost of meeting this US\$ obligation if you decide to hedge using a forward contract.

(5 marks)

- c. At what future spot exchange rate will you be indifferent between the forward and option market hedges?

(5 marks)

- d. Illustrate the future dollar costs of meeting the US\$ payable against the future spot exchange rate under both the options and forward market hedges.

(8 marks)

### **QUESTION 4 (25 MARKS)**

Briefly define each of the major types of international bond market instruments, noting their distinguishing characteristics.

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